BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF HAWAII

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate the Implementation Of Feed–in Tariffs.	DOCKET NO. 2008-0273

BLUE PLANET FOUNDATION'S COMMENTS ON HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED'S COMMENTS ON PROPOSED CONCEPTUAL FRAMEWORK FOR RELIABLITY STANDARDS WORKING GROUP FILED MARCH 31, 2010

AND

CERTIFICATE OF SERVICE

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Blue Planet Foundation ("Blue Planet"), by and through its attorneys Schlack Ito Lockwood Piper & Elkind, hereby submits its comments ("Comments") on the comments of the Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited's ("MECO") (collectively, "HECO Companies") on their proposed Reliability Standards Working Group ("Working Group") filed March 31, 2010 as follows.[1]

I. DISCUSSION

A. Upon Approval of the Tariffs, the Commission Should Direct the HECO Companies to Implement the Feed-In Tariff Immediately.

In its filings with the Commission, Blue Planet has proposed that the Commission direct the HECO Companies to implement the feed-in tariff ("FIT") fully on the HECO system and in phases on the HELCO and MECO systems without delay. (Blue Planet submits the record supports both full and phased implementation of the FIT on the HELCO and MECO

[1] The Working Group is discussed in the HECO Companies' Reliability Standards Report filed February 8, 2010; February 26, 2010 letter to the Commission; "Proposed Conceptual Framework for Reliability Standards Working Group" attached to the February 26, 2010 Letter ("Framework"); and March 31, 2010 letter to the Commission.

systems, but has focused on phased implementation.) For phased implementation, Blue Planet proposes two phases which should apply to each company. Each phase would last approximately one year. During each phase, it is assumed that up to 5 megawatts ("MW") of primarily solar photovoltaic ("PV") energy would be added to the HELCO and MECO systems.[2]

There is no need to delay conclusion of the FIT docket to 2011 or longer simply to determine technical limits on the FIT program. The HECO Companies propose that "timing of implementing the FIT" on the HELCO and MECO systems "should be subject to review by the proposed Working Group." Letter from D. Endo-Omoto (HECO) to Commission dated Feb. 26, 2010 at 3, 5. *Id.* at 3, 5. The HECO Companies' proposed schedule for the Working Group proposes three "interim reports" and a "final report." *Id.*, Attachment 1 at 7. The first interim report is due September 30, 2010 and the final report is due June 30, 2011. *Id.*

Thus, even assuming the Commission adopts the HECO Companies' proposed Working Group and report schedule, the Working Group proceeds without delay, one of the interim reports recommends implementation of the FIT on the HELCO and MECO systems, and the Commission promptly adopts the recommendation, the HECO Companies propose delaying implementation of the FIT a minimum of six months and up to one full year or longer. Although the HECO Companies' March 31, 2010 letter proposed postponing certain aspects of their Working Group proposal (including technical scopes of work, cost allocation, role of the Technical Support Group, and governance), that letter did not alter or postpone the proposed

[2] More specifically, during Phase 1 FIT projects for each company would be limited to project sizes established under Tiers 1 and 2 of the FIT and nameplate capacity equal to 2.5% of the 2008 system peak demand. Phase 2 would commence upon the conclusion of the first twelve months of the FIT, or upon Commission approval of formal reliability standards and the application of those standards to determine the capacity of the systems to accommodate energy from variable energy resources ("capacity determination"), whichever occurs first. During Phase 2, FIT projects for each company would be limited to either the D&O FIT cap or to the capacity determination.

schedule which would result in FIT implementation in 2011, as much as three years after initiation of this proceeding. *See id.* at 2.

B. An Independent Proceeding Is Needed to Address Renewable Energy Integration and Achieve Hawaii's Energy Objectives.

To achieve Hawaii's energy objectives in the coming years and decades, technical, policy and economic issues concerning the integration of renewable energy into the HECO Companies' electric systems must be examined and addressed. Specifically, two related undertakings are required. First, Hawaii must adopt formal reliability standards. Second, these standards must be used to determine, on an ongoing and iterative basis, the capacity of the HECO Companies' electric systems to integrate distribution level and transmission level variable energy sources ("VERs").[3] Blue Planet proposes that these interrelated undertakings – adoption of formal reliability standards combined with ongoing and updated VERs capacity determinations for each electric system – encompass renewable energy integration and that the independent proceeding may be denominated as the Renewable Energy Integration ("REI") docket.

1. Scope and subject matter of REI docket.

The scope and subject matter of the REI docket is to adopt formal reliability standards and use the standards to determine grid capacity for VERs. As explained in Blue Planet's prior submissions to the Commission, there are no technical reasons barring the use formal reliability standards for the HECO Companies' systems. Virtually all electric systems in the continental United States operate under North American Reliability Council ("NERC") reliability standards. The HECO Companies' systems are basically the same as other United

[3] *See* Federal Energy Regulatory Comm'n., Integration of Variable Energy Resources (Docket No. RM10-11-000), Notice of Inquiry dated Jan. 21, 2010, 130 FERC ¶ 61,053 at 1, n. 1 ("the term variable energy resource (VER) refers to renewable energy resources that are characterized by variability in the fuel source that is beyond the control of the resource operator. This includes wind and solar generation facilities and certain hydroelectric resources.").

States systems operating under NERC reliability standards insofar as all systems must maintain adequate voltage, balance supply and demand in real time, and maintain system stability. Indeed, as more fully explained in Blue Planet's March 15, 2010 comments on the Working Group, the experience of ERCOT and New Zealand demonstrates that formal reliability standards are appropriate and utilized not only in North America, but on isolated electric grids similar to those in Hawaii. *Id.* at 11-13.

The HECO Companies' electric systems are not currently planned and operated according to NERC-equivalent reliability standards. For example, NERC reliability standards establish specific requirements concerning frequency and voltage; the HECO Companies have testified they do not utilize a formal reliability standard for frequency and voltage. *See, e.g.*, Transcript of April 13-17, 2009 Panel Hearing (Docket No. 2008-0273), Vol. I at 206, Lines 19-21 ("And we don't – at this time we don't have those types of reliability standards or metrics."); Vol. I at 197, lines 19-23 ("At this time for the – the HECO companies there is no standard, per se, like a plus or minus frequency deviation, or three outages per year due to variable generation. There is no – none of those types of quantifiable criteria."); *see also* Vol. I at 182, lines 7-20; Vol. I at 189, lines 19-22.

Nor does the Commission's General Order No. 7, "Standards for Electric Utility Service in the State of Hawaii" ("General Order 7"), constitute "reliability standards." *See, e.g.*, Reply Brief of the HECO Companies and Consumer Advocate filed June 26, 2009 at 17-18. General Order 7 sets forth only rudimentary requirements and which the Commission adopted in 1968 – over four decades ago – well before the current major transition to a clean energy economy. Finally, due to the absence of formal reliability standards, the HECO Companies are at present under no requirement to publish official reports concerning compliance with standards.

As has been the experience in New Zealand, reporting on compliance with formal reliability standards will allow verification and increased knowledge and understanding about reliability issues by the Commission and stakeholders.

Although the scope of the HECO Companies' proposed Working Group extends beyond the FIT docket, unlike the REI docket its purpose is not to adopt formal reliability standards. The proposed scope of the Working Group extends well beyond a relatively narrow and discrete Commission decision on phased FIT implementation for HELCO and MECO to encompass NEM, non-FIT procurement mechanisms, and distributed generation more broadly. *See, e.g.*, February 26, 2010 Letter at 4 (Working Group to include NEM project developers from Maui and Hawaii Island); *see also* Framework at 2 (Working Group objectives include acceptance of "more intermittent renewable energy on the islands via FIT, as well as via other energy development mechanisms."); ("To the extent that the existence of reliability and/or curtailment challenges of integrating more variable renewables - including FIT resources - on any of the islands served by the Companies are validated . . . ."). The mismatch between a Commission decision on FIT implementation and the proposed scope of the Working Group underscores the lack of necessity and appropriateness of the Working Group in this docket.

The notion that the REI docket will delay implementation of the FIT or adoption of renewable energy in Hawaii does not withstand scrutiny. The record is sufficient for Commission decision at this time on HECO, HELCO and MECO implementation of the FIT. The Working Group, unlike the REI docket, raises doubts about timing of implementation of the FIT program by proposing an open-ended examination of reliability-related considerations concluding in 2011. An REI docket narrowly focused on adopting formal reliability standards and developing VERs capacity determinations should require no more time than the Working

Group. Assuming the REI docket is managed by an independent entity and the usual procedural safeguards are in place, the REI docket may run more smoothly and require less time than the Working Group because the parties will have recourse to established procedural mechanisms to obtain data and information and resolve disputes.

Similarly, the notion that adopting NERC-equivalent formal reliability standards would be overly complex and cumbersome is not accurate insofar as the REI docket would be narrowly focused on establishing the minimum number of critical and essential reliability standards necessary to make the VERs capacity determinations. *See* Division of Consumer Advocacy's Comments on Reliability Standards filed Mar. 23, 2010 at 6-10. Blue Planet has identified only four Hawaii-specific reliability standard categories and associated performance metrics it believes are essential and would provide an initial starting point for development of Hawaii specific standards. These include Real Time System Frequency Control Performance (NERC BAL-001, 003, 005), Power System Disturbance and Contingency Response (NERC BAL-002), Voltage Control and Reactive Power (NERC VAR-001, 002), and Load Shedding (NERC EOP-003). As previously explained, although consistent, formal statewide electric reliability standards are necessary, implementation and performance measures would vary to reflect island grid conditions and existing operational practices (for example, certain islands utilize under-load frequency shedding instead of spinning reserves in response to power system disturbances).

2. REI docket participants.

Given the importance of formal reliability standards to Hawaii's clean energy future and the potential substantive technical contributions by various stakeholders, it is imperative that all interested entities be permitted to seek to intervene in any new proceeding. The Framework proposes that the parties to the Working Group be limited to the FIT parties, the

Public Benefits Fee administrator, a NEM developer from Hawaii Island, and a NEM developer from Maui. Framework at 2. The Framework requests the Commission to confer intervenor party status in the FIT docket to two new entities, the two NEM developers, without requiring these entities to formally intervene and without allowing other interested parties to seek to intervene in the proposed Working Group phase of the docket.

3. REI docket process.

Finally, process considerations support initiation of an independent Renewable Energy Integration docket. For the process to result in Hawaii formal reliability standards (which are then used to make VERs capacity determinations), the process should be similar to that utilized in the development of NERC reliability standards in North America. The process used by NERC to establish and maintain bulk power reliability standards is open, transparent and utilizes significant stakeholder involvement to develop and modify the standards. The process is subject to Federal Energy Regulatory Commission ("FERC") oversight, and standards developed pursuant to the process are subject to FERC approval. The hallmark of the NERC standard-setting process is that an entity other than the local utility manages the process and maintains an open and transparent process with substantial stakeholder participation.

For the process to result in an accurate determination of the HECO Companies' VERs capacity based on formal reliability standards, it must have the same fundamental characteristics of the NERC standards-setting process: open, transparent, and conducted by an independent entity. In an REI docket to develop formal reliability standards and determine VERs capacity, presumably all parties would have equal access to the relevant data and information, including confidential data under protective orders in the new docket and/or non-disclosure or other similar agreements.

The Framework also does not propose a panel hearing; a new docket would likely include a panel hearing to allow the Commission to properly evaluate the evidence concerning proposed reliability standards and VERs capacity determinations. These decisions are critical to Hawaii's energy future and the Commission should have the ability to evaluate the evidence in a hearing. A new REI docket would also ensure intervenor parties have the right, through formal discovery, to gain access to data and information, including system performance data, necessary to evaluate reliability concerns. Blue Planet's view is that gaining access to system performance data to evaluate and validate reliability concerns is as important and valuable, if not more so, than additional system studies, especially given the many studies already performed to date.

II. CONCLUSION

For all of the foregoing reasons, Blue Planet respectfully renews its request that the Commission (i) upon approval of the tariffs direct the HECO Companies to fully implement the FIT on the HECO system immediately and without delay, and implement the FIT on the HELCO and MECO systems either fully and immediately or in phases, (ii) conclude the FIT docket in due course and without the extending the docket for purposes of the proposed Working Group, and (iii) initiate an independent Renewable Energy Integration proceeding open to all stakeholders for the purpose of developing and adopting formal reliability standards and using those standards to determine the capacity of the HECO Companies systems to accept variable energy resources.

DATED: Honolulu, Hawaii, April 8, 2010.

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I HEREBY CERTIFY that on this date a copy of the foregoing document was duly served upon the following individuals by placing a copy of same in the United States Mail, postage prepaid, and/or by electronic service, as follows:

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